

CLAIMS

1. An ink receptive substrate comprising:

(i) a support material; and

(ii) a porous polymer layer on the support material obtained by polymerisation of a microemulsion on the support material;

wherein the microemulsion comprises a co-polymerisable surfactant.

2. A substrate according to claim 1 wherein the co-polymerisable surfactant comprises a ethylenically unsaturated compound which carries a cationic or anionic group.

3. A substrate according to claim 1 or 2 wherein the microemulsion comprises water, a polymerisable oil and the co-polymerisable surfactant.

4. A substrate according to any one of the preceding claims wherein the co-polymerisable surfactant is an addition-polymerisable surfactant.

5. A substrate according to any one of the preceding claims wherein the microemulsion is a polymerisable oil-in-water, water-in-oil or bicontinuous microemulsion.

6. A substrate according to any one of the preceding claims wherein the microemulsion is a polymerisable bicontinuous microemulsion.

7. A substrate according to any one of the preceding claims wherein the microemulsion is photopolymerisable.

8. A substrate according to any one of the preceding claims wherein the microemulsion contains a mordant.

9. A substrate according to any one of the preceding claims wherein the microemulsion contains a cationic surfactant.

10. A substrate according to any one of the preceding claims wherein the microemulsion comprises:

(a) 5 to 95 parts of aqueous phase;

(b) 10 to 70 parts of polymerisable oil; and

(c) 0.1 to 70 parts of co-polymerisable surfactant;

wherein all parts are by weight and the number of parts (a)+(b)+(c) adds up to 100.

11. A substrate according to claim 10 wherein the microemulsion is free from porous inorganic compounds.

12. A substrate according to claim 10 or 11 wherein the surfactant is a cationic surfactant.

13. A substrate according to any one of the preceding claims wherein the microemulsion contains a block copolymer comprising hydrophobic and hydrophilic units.

14. A process for preparing an ink receptive substrate carrying a desired image comprising applying an ink to an ink receptive substrate to give the desired image, wherein the ink receptive substrate is as defined in any one of claims 1 to 13.

15. A process according to claim 14 for preparing an ink receptive substrate carrying a desired image comprising the steps:

- (a) applying a polymerisable microemulsion to a support material;
- (b) polymerising the product of step (a) to give an ink receptive substrate; and
- (c) applying an ink to the ink receptive substrate to give the desired image.

16. A process according to claim 15 wherein the ink is applied in step (c) by means of an ink jet printer.

17. A process according to claim 1 or 16 wherein the ink contains a yellow, magenta, cyan or black colorant.

18. A process according to claim 15, 16 or 17 wherein the microemulsion contains a cationic compound and the ink contains an anionic dye.

19. A kit comprising:

- (a) an ink receptive substrate comprising a support material and a porous polymer layer, wherein the porous polymer layer has been obtained by polymerisation of a microemulsion; and
- (b) written instructions to print the substrate with an ink.

20. A kit according to claim 19 where the substrate is as defined in any one of claims 1 to 13.